

Listing of the Claims:

1-15. (Canceled)

16. (Currently amended) An epitaxial growth method of III-V nitrides alloy, comprising:

spreading a liquid comprising one or more group III elements and nitrogen on a substrate;

~~forming a spin-coated layer by coating the substrate with a thin film comprising group III elements and nitrogen by spinning at selected rotation speeds; spin coating the~~
substrate with the liquid by spinning the substrate having the liquid at selected rotation speeds to form a thin, spin-coated layer of the liquid covering the entire substrate;

annealing the spin-coated layer in a gas atmosphere at a temperature equal to or higher than 700°C so as to crystallize the spin-coated layer; and

growing an III-V ~~nitrides~~ nitride alloy film on the spin-coated film after said annealing, which is thicker than the spin coated layer and provided that any group III element in the grown III-V nitride alloy film is different from the one or more group III elements of the spin-coated film.

17. (Currently amended) The epitaxial growth method ~~of III-V nitrides~~ of claim 16, wherein the gas atmosphere comprises ~~a gas, wherein the gas comprises~~ nitrogen as an element.

18. (Canceled)

19. (Currently amended) The epitaxial growth method ~~of III-V nitrides~~ of claim 17 wherein the gas atmosphere comprises ammonia.

20. (Currently amended) The epitaxial growth method ~~of III-V nitrides~~ of claim 17 wherein the gas atmosphere comprises radical nitrogen atoms.

21. (Withdrawn) The epitaxial growth method of claim 16 wherein the spin-coated film is selected from the group consisting of GaN, AlN, InGaN, and AlGaIn.

22. (Withdrawn) The epitaxial growth method of claim 16 wherein the substrate is selected from the group consisting of sapphire, SiC, Si, GaAs, InP, GaP, ZnO, MgO, LiGaO₂, and LiAlO₂.

23. (Currently amended) The epitaxial growth method of claim 16 wherein the epitaxial III-V ~~nitrides~~ nitride alloy film comprises a pn junction.

24. (Currently amended) The epitaxial growth method of claim 16 wherein the epitaxial III-V ~~nitrides~~ nitride alloy film is grown by a method selected from the group consisting of metal organic chemical vapor deposition, molecular beam epitaxy, and hydride vapor phase epitaxy.

25. (Currently amended) The epitaxial growth method of claim 16 wherein the epitaxial III-V ~~nitrides~~ nitride alloy film is grown by a sequential combination of two or more different growth methods selected from the group consisting of metal organic chemical vapor deposition, molecular beam epitaxy, and hydride vapor phase epitaxy.

26. (Withdrawn) The epitaxial growth method of claim 16 wherein the spin-coated film is formed by more than two spin coatings.

27. (Withdrawn) The epitaxial growth method of claim 26 wherein the spin-coated film is formed by more than two cycles of spin coating and annealing.

28. (Withdrawn) The epitaxial growth method of claim 26 wherein the composition ratio varies in the spin-coated film.

29. (Withdrawn) The epitaxial growth method of claim 26 wherein the lattice constant in the spin-coated film is monotonously increased from the substrate to the epitaxial III-V nitrides alloy film.

30. (Withdrawn) The epitaxial growth method of claim 26 wherein the lattice constant in the spin-coated film is monotonously decreased from the substrate to the epitaxial III-V nitrides alloy film.

31. (Original) The epitaxial growth method of claim 16 wherein the substrate has a cover layer on the surface on which the spin coating is applied.

32. (Previously presented) The epitaxial growth method of claim 31 wherein the substrate is silicon covered by silicon carbide.

33. (Currently amended) The epitaxial growth method of ~~claim 30~~ claim 31 wherein the substrate is silicon covered by zinc oxide.

34. (Currently amended) An epitaxial growth method of III-V nitrides alloy, comprising:

spreading a liquid comprising ~~group III elements~~ a compound having a metal and oxygen on a substrate;

forming a spin-coated layer of the liquid on the substrate ~~by coating the substrate with a thin film comprising group III elements and oxygen~~ by spinning the substrate having the liquid at selected rotation speeds;

annealing the spin coated layer in a gas atmosphere so as to crystallize the spin-coated layer; and

growing an III-V ~~nitrides~~ nitride alloy film on the spin-coated film after said annealing.

35. (Currently Amended) The epitaxial growth method of ~~III-V nitrides~~ of claim 34, wherein the gas atmosphere comprises ~~a gas, wherein the gas comprises~~ oxygen as an element.

36. (Canceled)

37. (Currently amended) The epitaxial growth method of ~~III-V nitrides~~ of claim 35 wherein the gas atmosphere comprises H₂O gas.

38. (Currently amended) The epitaxial growth method of ~~III-V nitrides~~ of claim 35 wherein the gas atmosphere comprises O₂ gas.

39. (Previously presented) The epitaxial growth method of claim 34 wherein the spin-coated film is selected from the group consisting of zinc oxide, magnesium oxide, and aluminum oxide.

40. (Original) The epitaxial growth method of claim 34 wherein the substrate is selected from the group consisting of sapphire, SiC, Si, GaAs, InP, GaP, ZnO, MgO, LiGaO₂, and LiAlO₂.

41. (Currently amended) The epitaxial growth method of claim 34 wherein the epitaxial III-V ~~nitrides~~ nitride alloy film comprises a pn junction.

42. (Currently amended) The epitaxial growth method of claim 34 wherein the epitaxial III-V ~~nitrides~~ nitride alloy film is grown by a method selected from the group consisting of metal organic chemical vapor deposition, molecular beam epitaxy, and hydride vapor phase epitaxy.

43. (Currently amended) The epitaxial growth method of claim 34 wherein the epitaxial III-V ~~nitrides~~ nitride alloy film is grown by a sequential combination of two or more growth methods selected from the group consisting of metal organic chemical vapor deposition, molecular beam epitaxy, and hydride vapor phase epitaxy.

44-47. (Canceled)

48. (Currently amended) The epitaxial growth method ~~of III-V nitrides~~ of claim 34 wherein said annealing occurs at a temperature of 700°C or more.

49-50. (Canceled)

51. (Currently amended) The epitaxial growth method ~~of III-V nitrides~~ of claim 48 wherein the annealing occurs in a gas atmosphere, ~~wherein the gas atmosphere comprises a gas,~~ wherein the gas comprises oxygen as an element.

52. (New) The epitaxial growth method of claim 31 wherein the cover layer is formed by sputtering or CVD.